

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 62095210  
PUBLICATION DATE : 01-05-87

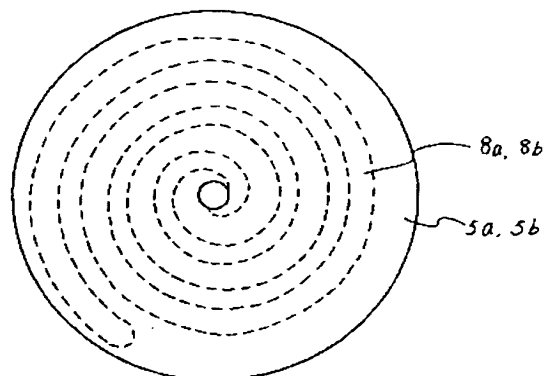
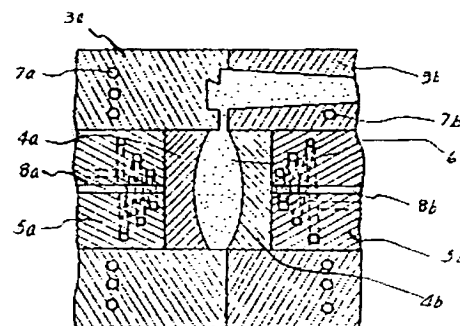
APPLICATION DATE : 23-10-85  
APPLICATION NUMBER : 60235188

APPLICANT : HITACHI LTD;

INVENTOR : TAKESHITA MASAMICHI;

INT.CL. : B29C 45/26 B29C 33/02 B29C 43/36  
B29C 45/73 // B29L 11:00

TITLE : MOLD FOR MOLDING PLASTIC



ABSTRACT : PURPOSE: To permit molding of a molded product having a large thickness ratio with a high accuracy by a method wherein cooling structure are arranged properly to equalize the cooling speed of the central portion of a thick portion and a thin portion.

CONSTITUTION: A molded lens 6 is molded between a movable insert piece 4a and a fixed insert piece 4b while a movable mold 3a, a fixed mold 3b and cooling blocks 5a, 5b are provided with heat medium flow paths 7a, 7b, 8a, 8b to cool the molded lens 6. The heat medium flow paths 8a, 8b are connecting the centers of the surfaces of the cooling blocks 5a, 5b, which are contacted with the movable insert piece 4a or the fixed insert piece 4b, to the same which are not contacted with the movable insert piece 4a or the fixed insert piece 4b through straight lines while the surfaces which are not contacted with the insert pieces 4a, 4b are the inlet sides of the heat medium. The surfaces, which are contacted with the movable insert piece 4 or the fixed insert piece 4b, recede from the insert pieces 4a, 4b while being expanded outwardly. The heat medium flow path is a scroll type to make a temperature distribution symmetrical with respect to the axis thereof while the heat medium flow paths 7a, 7b are arranged at positions having the same depth substantially as the outer peripheral sections of the heat medium flow paths 8a, 8b. According to this method, the cooling speed of the surface of a thin portion can be slowed down, while the cooling speed of the surface of a thick portion can be quickened.

COPYRIGHT: (C)1987,JPO&Japio